B.C. Oyster Production and Marketing

An Overview

Ministry of Agriculture and Fisheries
Marketing Branch
Aquaculture Marketing

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PREFACE

This publication has been prepared in response to a need for current market information on the oyster industry in British Columbia. It is not the objective of this publication to examine all the complex facets of marketing oysters. This publication focuses primarily on achieving an understanding of the current processing, pricing and marketing structure of the oyster industry.

Market information reported in this study is derived primarily from a market survey conducted recently by the Marketing Branch, B.C. Ministry of Agriculture and Fisheries. Many thanks are extended to the B.C. oyster producers, B.C. seafood wholesalers and B.C. seafood distributors for their participation.

Other information was provided by various members of the Fisheries Branch, Ministry of Agriculture and Fisheries (previously Marine Resources section of the Fisheries Branch, Ministry of Environment).

This publication was prepared by Ross Armstrong and Mei Li Lee. Technical assistance was provided by Lynne Macdonald.

Marketing Branch
B.C. Ministry of Agriculture and Fisheries

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I. INDUSTRY BACKGROUND

A. Formation and History

The oyster industry in B.C. dates from the turn of the century when both the native oyster (Ostrea lurida) and a transplanted Atlantic species (Crassostrea virinica) were first commercially marketed. For a number of years the industry was viable; however, by the mid 1930's over-harvesting of wild oysters and limited success culturing the Atlantic species led to a serious decline in shell stocks. Fortunately, about this time farmers began culturing another species of oyster (Crassostrea gigas) imported from Japan. Their seeding efforts in various coastal harbours, followed by a series of successful spawns during the 1940's and 1950's, resulted in wide spread distribution of the Japanese oyster. It is the Japanese, or Pacific Oyster, as it has come to be known, that is today commercially farmed and harvested on Georgia Strait and other protected waters of the B.C coast.

B. The Industry

The oyster industry in B.C has been and continues to be largely comprised of small, independent, family-owned operations. Growers establish farms on foreshore leased or licensed from the provincial government. Leases (licences) vary from 2 to 99 years. In general, terms are for 5, 10, 15, or 20 year periods.

Currently, about 3410 acres (1380 hectares) are leased out, largely in the Quadra/Sunshine Coast, Desolation Sound, and Southern Vancouver Island areas. There are approximately 194 growers who collectively hold 340 separate tenure agreements. These figures represent a 151 per cent increase over 1977 in leased (licensed) acreage and a 131 per cent increase in numbers of growers.

C. Culturing Methods and Productivity

Various culturing methods are available to the farmer, although by far the most commonly used is the bottom culture technique. In 1980, roughly 90 per cent of the industry's total production was produced by bottom culture (Valiela 1983). Other techniques involve off- or near-bottom culturing where oysters are suspended in water either on racks, trays or cluster lines. Off-bottom methods require shorter growing periods and result in substantially higher yields, but benefits must be balanced against increased capital costs and greater production risks (Pobran 1983).

Although potential yields from the bottom culture technique could reach as high as 200 gallons per year, per acre, reported production volumes tend to vary from 20 to 150 gallons depending on specific production and institutional factors.

In general, the main elements contributing to lower productivity include:

a) The prevalence of weekend and cottage style farms. A significant portion of farmers operate on a part time basis, using oystering revenues to supplement other sources of income.

b) The limited and irregular seeding of growing areas. In the past, a general shortage of oyster seed forced many farmers to depend on the natural spatfall to seed their grounds, but increased seed gathering efforts in Pendrall Sound, and more recently, the development of artificial remote setting techniques, have largely eliminated the shortage. One firm is currently developing the capacity to supply a large portion of the industry with more than adequate amounts of seed.

c) The inclusion of marginal culturing grounds in most leases. Rarely do leases (lots) provide a uniform yield, with certain areas of the property often being too muddy or soft for bottom culture techniques. However, if tide and current conditions are satisfactory, these areas can frequently produce oysters with other culturing techniques.

d) The continuing use of traditional bottom culture methods.

D. Grower Association and Marketing Board

The present marketing structure of the B.C. oyster industry dates to the early 1960's when farmers, faced with severe production and marketing difficulties, reorganized the Grower's Association (originally founded in the late 1940's) and established an industry marketing board. The B.C. Oyster Growers' Association and The B.C. Oyster Marketing Board continue to play a central role in the affairs of the B.C. oyster industry. The Oyster Growers' Association is comprised of growers and grower/packers, with Association membership open to all oyster lease and license holders on a voluntary basis. Members elect a directorate for both the Association and the Oyster Marketing Board.

As an over-seeing body, the Association works to represent and safeguard the interests of growers and grower/packers, addressing industry concerns such as Federal and Provincial legislation, product quality and packaging standards, and longer-term industry disequilibriums. The Oyster Marketing Board administers policy as directed by the Grower Association. Exercising a good deal of discretionary power over regulatory and pricing policy, the Board takes responsibility for such things as licensing, product pricing, transportation, packing, packaging, and storage of B.C oysters.

Although these organizations have facilitated more orderly operation of the industry, and, to a degree, have created greater unity and consensus among members, they have often been at the centre of industry controversy. With the rapid growth in the number of producers in recent years, it is anticipated that many policy and management issues will need to be addressed. These organizations may not remain in their present form given the industry expansion currently taking place.

E. The Product

The majority of oysters produced in B.C. are sold as a fresh product. A consistent small percentage are frozen (at packing houses or by wholesalers) for sale during summer months when the fresh product is in short supply and of poorer quality. Fresh oysters are sold either as a shucked product or "on the shell". Shucked oysters are usually packed in plastic containers that conform to industry sizing standards. However, in some cases, metal tins or plastic bags are used. Until recently, plastic container sizes included the 8 oz. (1/2 pint), 16 oz. (pint), 32 oz. (quart) and 128 oz. (gallon); however, three years ago the 128-oz. container was discontinued and it appears the 16-oz. pack is also being used less frequently. (The industry uses the American gallon as a base unit rather than an imperial or metric measure.)

Generally, shucked oysters are marketed by grower/packers under specific brand names, and it would seem several brands command a good deal of consumer loyalty. Industry critics suggest this practice results in a confusing number of brands on the market, but industry efforts to sell oysters under a single brand name (as mushroom growers do with the name "Money's Mushrooms") have been resisted by producers who fear a loss of sales.

F. Processing

Due to the highly perishable nature of shellfish, processing firms are licensed and regularly inspected by federal and provincial government agencies to ensure operators conform to various health, safety and fisheries standards. Although the industry has a good record in these areas, product quality control seems to be more of a continuing problem. The need for improved product quality and grading standards has been documented in several previous industry studies dating back to the late 1960's. Sizing and grading of oysters is not officially required by Board or government regulations, and although processors try to remove broken and discoloured stock and to separate the oysters into three sizes (small, medium and large[1]), this does not always occur. This is a problem, especially when oysters are in short supply and operators have difficulty filling orders. The self-policed B.C. system compares unfavorably with Washington State standards where oysters are graded into seven different sizes.

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[1] Based on how many oysters can be packed into a standard container.

Another problem often cited by wholesalers is packaging. Although the industry uses a strong, durable plastic container, the packages come with a snap-on lid which is not always secure. Some wholesalers have complained about spillage occurring during transport and they have recommended a pure pac or zip lock package as an alternative to the plastic container. Although these recommendations are not without cost to the processors, they represent relatively minor changes in production and marketing procedures, and would likely be of net benefit to the industry.

Some secondary processing of B.C. shucked oysters is currently done, and is generally limited to oysters unsuitable for fresh sale. For example, broken and discoloured grade oysters are currently smoked by at least one grower/packer, while large size soup oysters have periodically been fresh breaded and frozen or used in oyster stew. Over all, secondary processing volumes (including all shucked oysters that are smoked, boiled or prepared in some other way, and subsequently frozen, canned, or bottled) account for a very small percentage of the industry's total processing volume. A strong demand for fresh oysters and competitive pricing from imports make secondary processing of oysters relatively unattractive financially.

The other fresh product cultured by B.C. growers is the "half-shell" oyster. Usually grown in trays or by other off-bottom techniques for a shorter time period, the half-shell oyster is considered more visually appealing (and therefore more saleable) than the shucked oyster both because of its smaller size and attractive "in shell" display. Grown mainly for the restaurant trade, the half-shell oyster is a higher quality, specialty item that commands premium prices in the marketplace.

II. PRODUCTION

A. Industry Production

During the last twenty years, industry production in B.C. has fluctuated widely. However, an overall downward trend is clearly evident dating from the peak production years of the early to mid 1960's. Canada-wide yields have also fluctuated and declined so that, on balance, B.C. production has maintained a 60-70 per cent share of the total Canadian harvest (see Figure 1).

Declining yield in B.C. result from a variety of environmental and institutional factors, some of which have been mentioned previously. Another important contributing factor has been the loss of productive foreshore due to sewage and industrial pollution. For 1974, for example, over 800 acres (324 hectares) of prime culturing area were subject to closure or partial restriction (Valiela 1979).

Other contributing factors relate to the harvest of wild oysters. Although the majority of B.C. oyster production is cultured on leased or licensed foreshore, a declining but significant proportion continues to be harvested or transferred from vacant crown foreshore. (This includes shellstock, harvested and processed, and other stock transferred on to licensed foreshore for an indefinite period of time.) Between 1967 and 1975 (a period in which high production volumes occurred), an average of 1200 tons or 30,000 gallons per year of wild oysters were harvested under license. By 1985, this figure had been reduced to 500 tons. A substantially reduced wild harvest indicates a significant depletion of wild stocks. To correct this situation, provincial authorities are currently pursuing a policy of reduced harvesting under license to allow stocks time to replenish.

The harvest of wild oysters in any given year depends on the success of the spawn in previous years and the existing level of wild stocks. Because the spatfall in B.C. waters is highly variable, significant year-to-year changes in wild production frequently occur and this in turn affects the industry's total production volume.

Although the industry's reduced dependence on wild stocks in recent years has moderated the more extreme fluctuations in production volumes, total industry yields remain at historically low levels. It has only been in the last several years, as cultured production volumes have increased, that any consistent upward trend (approaching 100,000 gallons per year) has been realized.

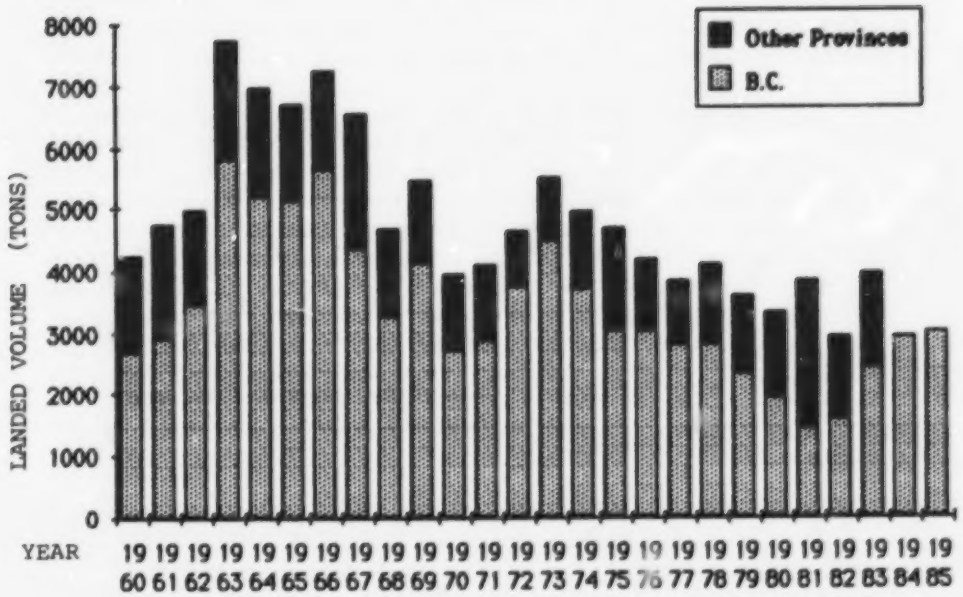

Figure 1. Oyster Production, B.C. and other Provinces, 1960 - 1985

Industry production figures are calculated yearly by both the Marine Resources Section, B.C. Ministry of Agriculture and Fisheries, formerly the Marine Resources Section, Fisheries Branch, Ministry of Environment, and the Oyster Marketing Board. These estimates frequently differ (Table 1). The Oyster Growers Association claims Marine Resources' figures consistently overstate production volumes because of double counting at the grower/packer level. A comparison of these production data does not appear to support the Association's claim. The Marine Resources Section collects and publishes two sets of oyster production data. The first set, landed volume, is based on production reported from licenced leases and wild picking permits. The recording process does not separate oysters harvested from one lease to be set on another lease. Hence, total production from leases may not reflect actual production sold to market. The second data set is derived from oysters that have been processed by licenced processing plants. Although some problems do exist with this collection process, it is a relatively accurate reflection of oysters produced and sold to market. These are the estimates shown in Table 1. Problems also exist with the Marketing Board figures. They tend to understate industry production for the following reasons:

a) Estimates include only those oysters produced by licensed growers and/or processed by licensed grower/packers. In 1985, less than 50% of lease and lot holders were active members in the B.C. Oyster Growers Association, and were reporting production volumes to the Oyster Marketing Board.

b) Reporting by growers and grower/packers may be inaccurate. Because growers and grower/packers are charged a license fee based on production volumes, there exists a strong incentive for operators to understate their yields.

c) Non-licensed growers and poachers selling directly to the retail level (restaurants and retail outlets) to avoid regular market channels (i.e., Board-licensed production through wholesalers and finally to the retail level). Although such sales are illegal, they are undoubtedly occurring. Information on the volume of stock reaching the market through illegal channels is currently unavailable.

In our market survey, production data was collected from 19 licensed grower/packers and this is used as a proxy for total industry production. Because virtually all shellstock must be processed before reaching final markets, production volumes moving through processing facilities provide a good estimate of total industry production. In 1985, total production volumes amounted to 90,260 gallons of fresh and frozen shucked oysters and 247,780 dozen of half-shell oysters. As indicated in Table 1, the survey's in/half-shell figures fall consistently between Marketing Board and Marine Resources Section estimates and the shucked figures are higher than the other industry estimates.

Production volumes from the survey can be broken down by producer type growers (producers who only culture oysters), and grower/packers (operators who combine culturing and processing activities).

Table 1

COMPARATIVE VOLUME ESTIMATES FOR B.C. OYSTER PRODUCTION, 1983-1985

	MARKET SURVEY	B.C.O.G.A.	MARINE RESOURCES
1983			
Shucked (Gallons)	46564[a]	52154	45477
In/Half-Shell (Doz.)	98019[a]	92121	135634
1984			
Shucked (Gallons)	78252	54697	62619
In/Half-Shell (Doz.)	106575	92836	194006
1985			
Shucked (Gallons)	90261	55000[b]	68097
In Shell (Doz.)	247787	120000[b]	270228

[a] Incomplete Figures.
[b] As of May 23, 1986.

B. Industry Concentration

Historically, the larger, integrated firms have accounted for the bulk of industry production, but in recent years their production share has declined. Currently, volumes are more or less evenly distributed between the two groups with growers producing 46 per cent of the total shucked product and grower/packers producing 54 per cent. For the half-shell product, growers produce 47 per cent and grower/packers 53 per cent.

These figures suggest neither type of operator dominates in the primary production of oysters, but this is not entirely true. The growers are usually small operators producing only a relatively small volume of oysters. They account for almost half of industry production by virtue of their large numbers. In 1985, there were 171 oyster growers and 19 oyster grower/packers. Of the total oyster growers, 119 reported no production and the remaining 52 were responsible for 46 per cent of the industry's shucked production[2]. In contrast, 14 of the 19 producer/packers were responsible for 54 per cent of the total industry production. The remaining 5 either had no production or production figures were not available. For half-shell oysters, 61 of the 171 growers produced 47 per cent of industry volume. The other 110 growers reported no production. Of the 19 grower/packers, 13 are responsible for 53 per cent of the industry production. The remaining 6 grower/packers either had no production or production figures were not available. Further dissection of the grower/packer data indicates that the top 8 firms (each producing 2,000 gallons or more) produced 44,815 gallons or 91 per cent of the total grower/packers shucked volume and 50 per cent of total industry shucked volume. Similarly, the top eight firms (each producing 2,000 dozen or more) accounted for 127,243 dozen or 97 per cent of grower/packers half-shell volume and 52 per cent of total industry volume.

Grower/packers, then, appear to dominate in culturing operations by virtue of both a majority share of production, and relative concentration of operations, but their industry domination may well be declining. The reason for this is two-fold. Firstly, as noted above, there are a large number of small producers in the industry, many of whom have only recently established farming operations. Since 1982, 45 new growers have established farms and although their current yields are low, largely because of start-up time lags, they are expected to have substantial production increases in the near future. An interesting development related to this industry growth is that these new growers may well be causing a restructure of the industry so that culturing and processing activities will be carried out as separate, specialized operations. Current excess processing capacity, smaller profit margins in shucking operations, and the strong likelihood of some economies of scale in larger processing plants add further impetus to this change. It is conceivable, then, that most growers will no longer operate shucking houses and, likewise, some firms will start to specialize in processing activities.

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[2]Assumes that all production from growers have passed through a processing plant.

A second factor leading to greater industry prominence for growers has been the provincial government's enforcement of a diligent-use policy. This has been a particularly contentious issue for the industry, especially when proceedings have been launched against well-established growers. A 50-gallon-per-year-per-acre minimum production quota is considered by many in the industry to be unreasonably high. Advocates cite the fact that the largest and most successful Washington State firm does not produce this volume of oysters. Producers feel the Marine Resources Section, in enforcing the quota, is not acting in their best interest. Growers who have traditionally been weekend farmers are now required to meet a minimum production quota or face loosing their foreshore property rights. The Ministry of Lands and Forests estimated that fourteen operators have lost leases (lots) over the past 2 years.

Although estimates are currently unavailable for anticipated production increases in the future, an industry growth trend appears to be continuing with about 270 grower management plans submitted in 1985 and the first six months of 1986. Major increases in numbers of growers will undoubtedly impact not only on the industry's organizational structure and marketing operations, but also on Marketing Board and Grower Association policies.

At the processing or packing level of the industry, figures show an increasingly high level of concentration, as well as a substantial degree of vertical integration.[3] These industry characteristics are attributable to grower/packers, larger operators who have been in the industry a number of years. On average, these firms process between 7,000-15,000 gallons per year, usually handling all their own production and a sizeable volume of shell stock purchased from other growers. Survey figures indicate 19 grower/packers are currently operating in B.C. and of these approximately 15 are considered to be commercially-sized firms. The top four firms of this group currently handle about 59 per cent of the industry's total processing volume and if the top eight firms are included they account for close to 89 per cent of this figure. In 1970, the top four firms handled 53 per cent of the industry's production, while the top eight firms processed approximately 73 per cent of total production. Since 1970, there has been a substantial increase in market share for the larger processing companies.

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[3] Concentration refers to the number of firms in an industry and the portion of total production they are responsible for. The fewer the number of firms producing a given volume of output the more concentrated the industry is said to be. Highly concentrated industries are of concern to analysts because such a situation provides greater opportunities for price fixing and other forms of market manipulation. Vertical integration refers to firms that operate at various levels in an industry. For example, vertical integration occurs in the forest industry where firms harvest trees, operate milling facilities, and perhaps deliver finished wood products to final markets.

In summary, the oyster industry in B.C. displays a moderate degree of concentration at the grower level. A small number of older, integrated firms produce roughly 50 per cent of the industry's shell stock volume while a large number of small, newer operators, most of whom specialize in culturing operations, account for the remaining portion. Expected production increases in the future will likely come from new producers and to a lesser degree from weekend farmers and others who are now required to meet minimum production standards. At the processor level, the industry displays an increasingly high level of concentration - almost 60 per cent handled by the top four firms and this is particularly noteworthy when we find the same four firms produce over 40 per cent of the industry's shucked and half-shell stocks. With such a large influx of new growers, a restructure of the industry may well be under way. One possible scenario is for an industry movement toward greater specialization of culturing and processing operations.

III. MARKETING AND PRICING STRUCTURE

A. Pricing Structure

In B.C., the pricing of shucked and half-shell oysters is partially regulated by the Oyster Marketing Board. A pricing structure at the processor and wholesaler levels sets minimum prices for oysters produced and sold in B.C. The minimum guaranteed pricing scheme does not extend to the grower level. This largely reflects a past industry structure where producers processed their own oysters. Today, most new entrants to the industry are either unwilling or are too small to operate shucking facilities. Consequently, they must rely on other firms for processing of stock. Without a minimum price structure for shell stock, growers receive the going market rate. Although this has not been a problem because of a continuing strong demand for fresh oysters, it is clearly a departure from the pricing policy pursued at other levels of the industry.

The pricing structure does not apply to either imported oysters or to local production sold internationally or in other provinces. Furthermore, regulation in B.C does not extend to the retail level (i.e., retail outlets, restaurants, etc.). Hence, to some degree, consumer or retail prices in both B.C. and out-of-province markets are a function of what the market will bear.

At the processor level, pricing is based on the average cost of production plus a margin for profit. Although this average cost system has periodically resulted in losses for some producers, it appears, in recent years, to have operated without too many problems and is currently well accepted by the industry. Since the 1970's, the pricing system has been linked to the consumer price index. Periodically, a discount price is used to deal with excess supply in the marketplace.

Within B.C., Board-licensed processors sell to licensed and non-licensed wholesalers and, in some cases, directly to retailers and other buyers. Licensed sales are the basis for the pricing system with a 20 per cent additional charge on sales to non-licensed wholesalers, and other businesses at the retail level (i.e., restaurants, etc.). As well, most processors have over-the-counter sales at their shucking plants. Although prices are lower on such sales (largely selling to passing tourists or other traffic), it gives processors a higher return by eliminating both shipping and handling costs.

Licensed wholesalers are required to buy stock from licensed processors and they in turn sell to retailers, restaurants, and other institutions, earning a 20 per cent margin that is also regulated by the Board. The policy of a Marketing Board setting wholesale prices is a somewhat unusual practice that has periodically met with a good deal of wholesaler opposition. The Board justifies this regulatory action by claiming it promotes uniform pricing at the wholesale/retail levels preventing undercutting of prices by processors and growers selling directly to the retail trade. In spite of the purported benefit to wholesalers, there continues to be opposition to the practice and it is perhaps only the unusually generous margin allowed to wholesalers that keeps the pricing structure in place.

The practice of licensed processors selling to non-licensed wholesalers has more or less stopped in recent years. Strong price competition, coupled with efficient distribution of the licensed product, makes the sale of non-licensed products largely untenable. This, plus the periodic restriction or refusal of new licenses to wholesalers, means that the vast majority of sales within B.C. are channeled through licensed wholesalers who, in most cases, have had long-standing relations with the Board.

B. Wholesaler Marketing Channels

To determine the relative importance of the various marketing channels, a survey of 28 oyster wholesalers and other distributors was undertaken. In 1985, B.C. wholesalers handled roughly 94,000 gallons of shucked oysters and 154,000 dozen half-shell oysters. Approximately 84 per cent of the shucked and 86 per cent of the half-shell volumes were produced by B.C. growers with the remaining portions imported largely from Washington State. Oysters were also imported from South Korea, China and the Phillipines. These countries accounted for a much smaller proportion of the total import volume and almost exclusively supplied a frozen product.

Aside from one or two large firms, the majority of wholesalers handle sales volumes of less than 5,000 gallons (5,000 dozen of half-shell) per year. Most firms service the B.C. market exclusively, largely in the Lower Mainland/Vancouver Island area, although several deal with out-of-province markets. On balance, about 84 per cent of the wholesale shucked and 86 per cent of the wholesale half-shell volumes were sold within B.C., with the remaining portions going to Eastern Canada and the U.S. (Figure 2). Sales within the province are largely subject to the Oyster Board's minimum pricing regime, although undoubtedly there were exceptions.

B.C. wholesalers sell largely to the retail and restaurant trades. To some small degree, other types of institutional sales also occur.

In 1985, 72 per cent of B.C. sales of shucked oysters went to the restaurant trade and 24 per cent went to the retail trade. The remaining 4 per cent went to other markets (i.e., hospitals). The half-shell oyster shows the following breakdown: 82 per cent restaurants, 15 per cent retailers, and 3 per cent others (see Figure 3). In regard to packaging, the restaurant trade uses the larger 32 oz. pack almost exclusively while retail outlets prefer the 8 oz. and, to a lesser degree, the 16 oz. packs for the home consumer market.

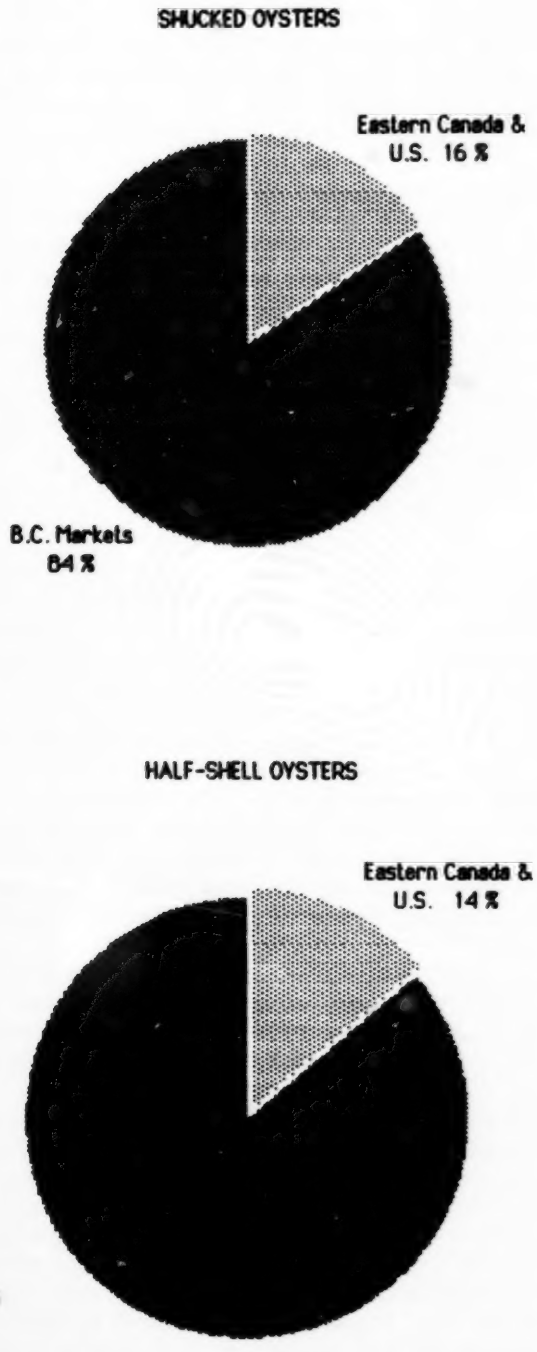

Figure 2. Distribution of B.C. and imported shucked and half-shell oysters by B.C. wholesalers, 1985.

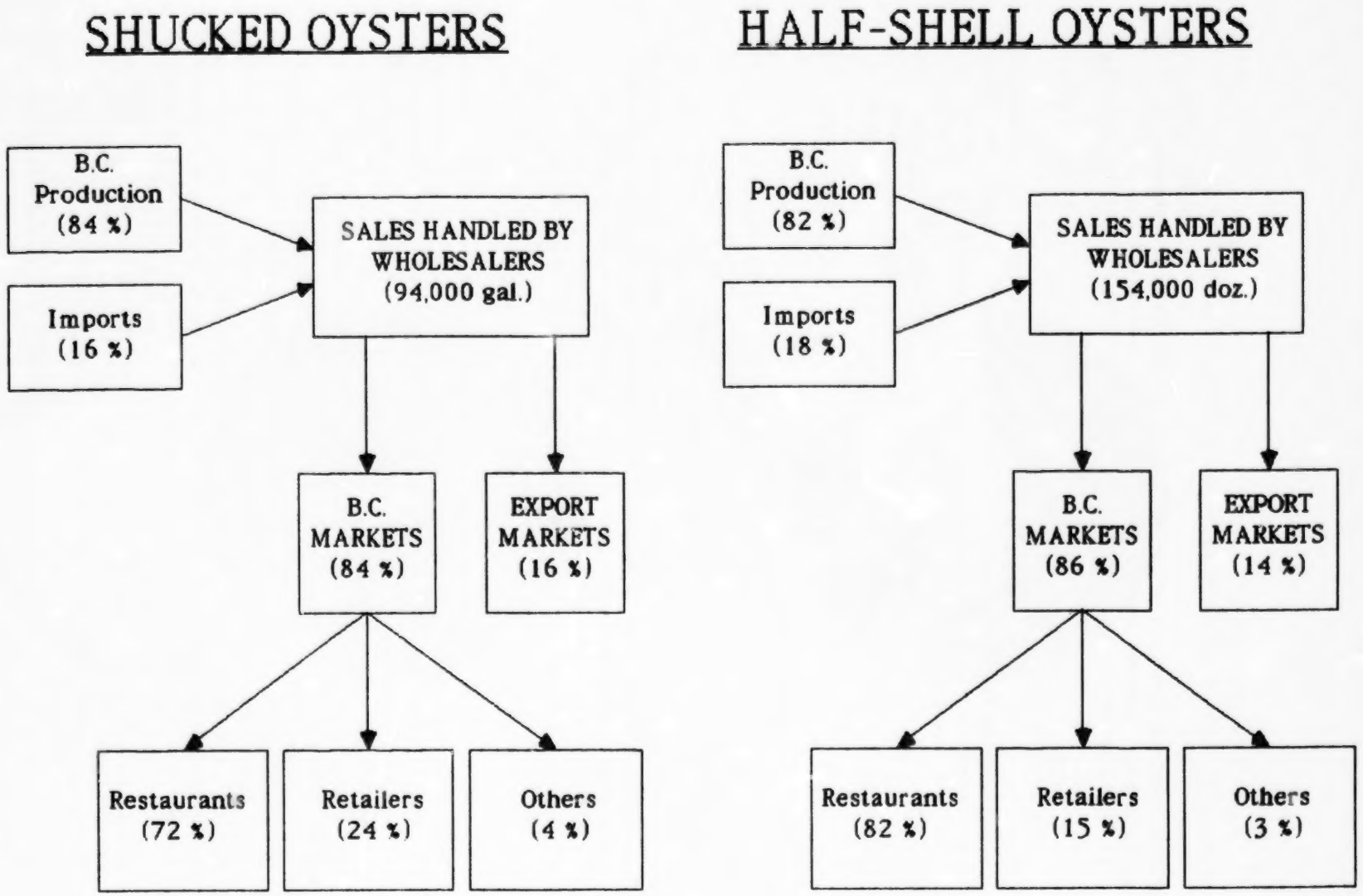

Figure 3: Summary of Oyster Marketing Channels as Identified by B.C. Wholesalers.

C. Producer Marketing Channels

The total B.C. production volume in 1985 was approximately 92,000 gallons of shucked and 247,000 dozen half-shell oysters. Wholesalers handled approximately 82 per cent (75,440 gallons) of the B.C. shucked product, but distributed 90 per cent (222,300 dozen)[4] of the B.C. half-shell product. This leaves about 16,000 gallons (18 per cent) of shucked and nearly 25,000 dozen (10 per cent) of half-shell oysters sold directly by producer/processors to either the retail level in B.C. or to out-of-province buyers, including wholesalers, restaurants and, to a lesser degree, retail outlets (Figure 4). Direct out-of-province sales by producer/processors were to markets in all the other western provinces, Ontario, Quebec, several states on the eastern seaboard and three western states including California, Washington, and Hawaii. Although exact sales volumes for each of these markets are unknown, approximately 82 per cent of direct half-shell sales went to out-of-province buyers while direct shucked sales went exclusively to consumers within B.C. Most out-of-province, half-shell sales were handled by grower/packers selling to wholesalers.

Within B.C., illegal marketing channels likely handle a portion of total industry sales, but these channels are particularly difficult to trace, and as a result, sales volumes are largely unknown. The industry has suggested illegal sales could be controlled if provincial authorities would inspect, more frequently, leased and vacant crown foreshore for poaching activity. At present, the Government is able to provide only limited on-site inspection.

In summary, B.C. oysters generally follow one of two marketing channels, either direct sales by producer/processors to final markets or through wholesalers to final retail markets.

D. Price and Demand

Overall, the pricing structure in B.C. promotes price consistency at the packer and wholesaler levels providing a minimum return to packers and upward price flexibility for both B.C. and out-of-province markets. Technically, this pricing system does not extend beyond the B.C. market, but because it is both a minimum price structure and a barometer of supply and demand forces, the system provides a good framework for broader analysis of B.C. industry markets.

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[4]The volume sold to wholesalers, as reported by producer/packers, is higher than the purchased volume reported by wholesalers. About 10 of the 28 wholesalers were not able to provide an estimate on their purchase of shell oysters.

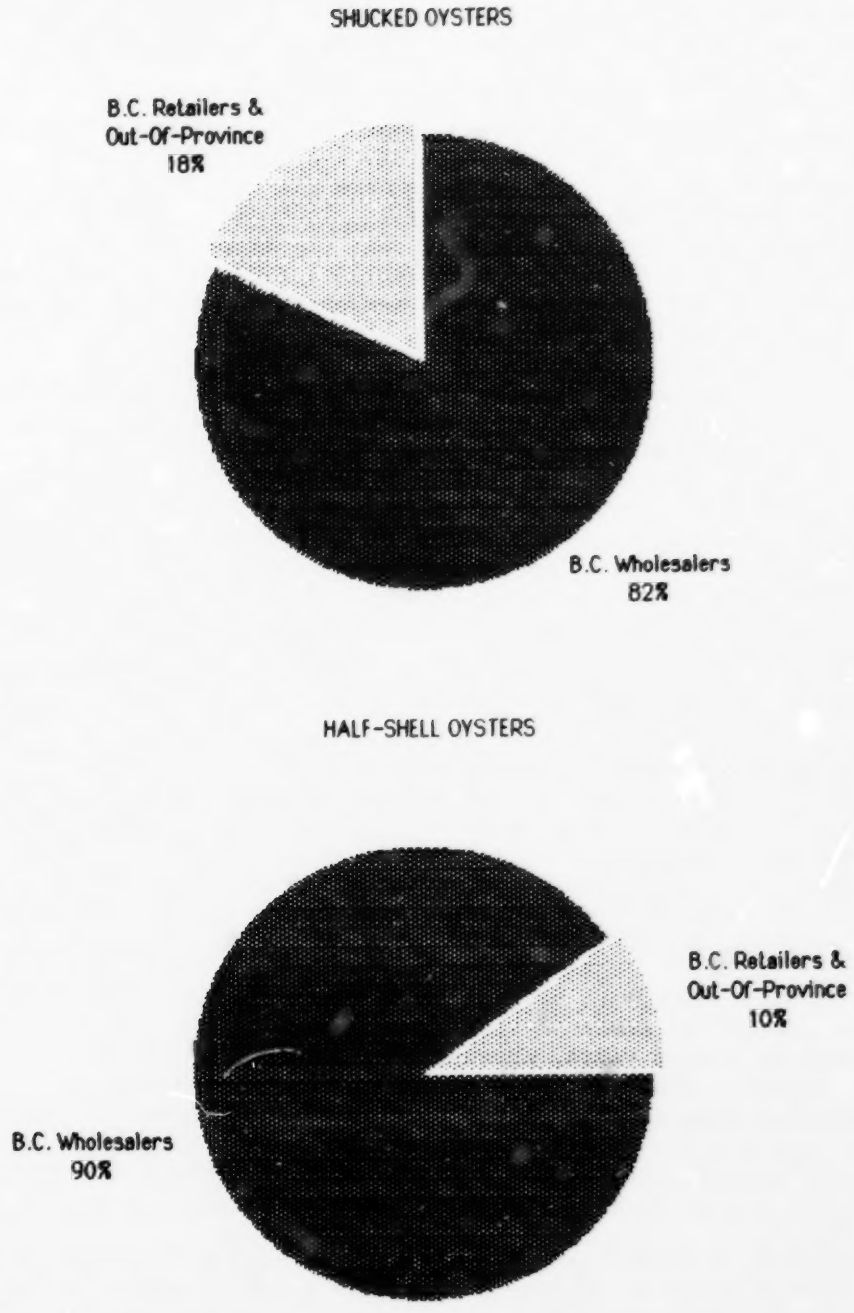

Figure 4. Distribution of B.C. shucked and half-shell oysters by producer/processors, 1985.

In examining price change patterns in B.C. over the last 12 years, we see substantial nominal (no adjustment made for inflation) increases during the 1970's and only small increases during the 1980's. Since 1973, nominal prices have increased 210 per cent while real price changes have been a small fraction of this increasing by only 10 per cent (see Table 2). Such a modest increase in the real price of oysters is somewhat surprising.

As noted above, Canadian oyster production has declined significantly since the mid-1960's and B.C. production, the single largest component of Canadian yields, has been particularly hard hit with roughly a 40-per-cent drop in volumes (see Table 1). Such a large decrease in supplies would normally have a significant impact on real prices. For example, during 1980, B.C. production volumes declined to their lowest level in decades and the result was a temporary, real price increase of roughly 20 per cent (See Table 2).

A greater, permanent increase in the real price of oysters has not occurred in B.C. because of longer-term accommodating adjustments made in the market. As Cahill notes, "shrinking North American supplies of fresh and frozen oysters have forced consumers to substitute canned oysters for the fresh/frozen product and, in the case of domestic and, particularly, B.C. markets, rely to a greater degree on imported fresh and frozen oyster products". Import figures for both B.C. and Canada as a whole support this contention. Between 1978 and 1985, Canadian canned oyster imports increased 20 per cent while B.C. imports increased 59 per cent. Fresh and frozen Canadian imports increased 76 per cent, while B.C. imports increased an astonishing 194 per cent to roughly 64,000 gallons in 1985 (Tables 3 and 4).

Although these figures clearly support Cahill's contention, it is important to note that these increases do not exclusively represent a substitution effect for lost Canadian fresh and frozen oyster supplies. The reason for this is that total demand has increased roughly 30 per cent since 1965. Both population growth and a greater consumer preference for seafoods, particularly fresh, also appear responsible for increasing import volumes.

Two further points can be made about these figures. First, it is clear B.C. fresh and frozen oyster imports have become much more significant in recent years, presently accounting for one-third of all Canadian imports. Second, the B.C. import figures are port-of-entry totals which indicates that only a portion of the volumes are actually consumed in B.C. The remaining portions are most likely going to the prairie and central provinces. A survey of B.C. wholesalers indicates roughly 40 per cent of this volume is actually consumed in B.C.

In summary, a significant drop in Canadian and B.C. oyster production has not had as great an impact on prices as could be expected. Market adjustments in the form of increasing fresh and frozen imports and a substitution of canned for fresh products have minimized real price increases.

Table 2

AVERAGE WHOLESALE PRICES (NOMINAL AND REAL) FOR SHUCKED OYSTER MEATS, SEATTLE, WASHINGTON AND B.C. (1972-1985)

	WASHINGTON[1]		B.C.		B.C./WASH.
YEAR	NOMINAL (Can$/Gal)	REAL[2] (Can$/Gal)	NOMINAL (Can$/Gal)	REAL[2] (Can$/Gal)	RATIO OF REAL PRICE
1973	9.32	21.38	7.90	18.12	0.85
1974	10.75	20.75	9.50	18.15	0.87
1975	11.12	18.97	10.00	16.04	0.85
1976	11.08	18.16	11.00	18.03	0.99
1977	13.73	21.22	12.00	18.55	0.87
1978	16.71	22.15	13.39	19.04	0.86
1979	19.29	23.63	16.43	21.33	0.90
1980	20.85	23.14	21.15	23.97	1.04
1981	20.70	20.70	21.60	21.60	1.04
1982	21.78	20.13	21.60	19.96	0.99
1983	22.82	20.23	21.60	19.15	0.95
1984	26.78	22.60	22.20	18.73	0.83
1985	30.05	24.63	24.00	19.85	0.80

[1]An average Canada-U.S. exchange rate was used.

[2]Using Vancouver Food C.P.I. (1981 = 100).

Source: N.O.A.A. "Shellfish Market Review," National Marine Fisheries, 1973-1982.

N.O.A.A. "Fisheries Market News Report," National Marine Fisheries Service, 1983-1985

B.C. Oyster Growers Association.

Table 3

CANADIAN IMPORTS OF FRESH AND FROZEN OYSTERS, 1973-1985

YEAR	CANADA		B.C.		B.C. AS A
	Tonnes	Gallons	Tonnes	Gallons	% OF CANADA
1973	863	237 739	N/A	N/A	N/A
1974	711	195 866	51	14 105	7
1975	467	128 649	61	16 854	13
1976	597	164 462	86	23 664	14
1977	490	134 985	72	19 752	15
1978	570	157 024	79	21 826	14
1979	614	169 145	108	29 672	18
1980	710	195 591	176	48 399	25
1981	757	208 538	202	55 708	27
1982	740	203 855	243	66 977	33
1983	720	198 346	223	61 493	31
1984	644	177 409	182	50 286	28
1985	708	195 040	232	63 942	33

Source: Imports By Commodity, Statistics Canada. Figures include shell stock.

Table 4

CANADIAN IMPORTS OF CANNED OYSTERS, 1976-1985

YEAR	CANADA		B.C.		B.C. AS A
	TONNES	GALLONS	TONNES	GALLONS	% OF CANADA
1975	1 333	367 218	731	274 645	55
1976	1 232	339 394	574	158 122	47
1977	1 286	354 270	651	179 513	51
1978	1 185	326 446	500	137 884	42
1979	879	242 149	471	129 741	54
1980	960	264 463	639	176 039	67
1981	1 032	284 290	553	152 252	54
1982	1 343	369 956	732	201 773	55
1983	1 213	334 145	661	182 135	54
1984	1 422	391 718	805	221 712	57
1985	1 427	393 095	793	218 552	56

Source: Imports by Commodity, Statistics Canada.

With these figures in mind, there can be little doubt Canadian producers are currently under-supplying domestic markets, and, as Cahill observed in 1982, "great potential appears to exist for the expansion appropriate for today's market situation".

E. The B.C. Market

In terms of the B.C. market, producers appear to be in a position to readily displace fresh/frozen imports and perhaps, to some degree, influence consumption patterns. Displacing canned imports by substitution of a fresh or locally-produced canned product seems a less likely option, and this is particularly true of the latter strategy, as noted previously.

As for displacing fresh/frozen imports, B.C. producers have a number of factors working in their favor. The first is location. As a port-of-entry, B.C. receives oysters from Korea, the Phillipines and China. The largest share of imports, however, comes from the U.S., specifically Washington State and Oregon. In fact, for 1985 over 80 per cent of the oysters imported to B.C. originated in the U.S. B.C. producers are geographically well situated to displace these imports, and have lower transportation and handling costs in delivering the products to market.

Second, perhaps the most important factor, is product pricing. In the past, the B.C. Oyster Board's lack of pricing authority over imported fresh and frozen oyster products has resulted in strong price competition, particularly from Washington State producers, and this has tended to undermine local support prices. Repeated attempts by the Board to convince Provincial and Federal authorities to widen their authority have failed. Consequently, to remain competitive, Board prices have had to match or undercut landed import prices.

This situation brings into question the role of the B.C. Oyster Board's pricing scheme. A comparative of B.C. and Washington State prices suggest that the B.C. industry is currently functioning in a more or less free market environment.

Table 2 examines nominal and real wholesale prices for shucked oysters in Washington State and B.C. First, it should be noted that Washington growers operate without any sort of minimum price arrangement. In examining price differences, it is evident that B.C prices have generally been lower than Washington State prices. Given the transportation costs, B.C. product can potentially undercut the Washington product by a comfortable margin.

Periodically, price competition from imports has been a serious problem for the industry, but this has largely occurred during periods when the Canadian dollar has been over-valued.[5] More recently, a lower valued Canadian dollar has not only allowed local producers to compete more effectively for a share of the B.C. market but, in some cases, has facilitated sales to the U.S. and other markets.

B.C. growers then appear to be quite competitive with U.S. producers, although the current exchange rate puts Canadian prices for the U.S. product roughly 25 per cent above local producer prices. This is obviously a significant price difference and is likely the result of a high value American dollar. In any event, the critical factor is the Canadian/U.S. exchange rate, and should the Canadian dollar appreciate sufficiently, B.C. producers would again experience a round of intensified price competition from U.S. producers.

F. Recent Import Trends

A record high level of oyster imports in 1985 (see Tables 3 and 4) seems inconsistent with what should be occurring in the market as a result of the Canada/United States exchange rate. However, operators may be arranging funding transfers in advance, so the full impact of a depreciated Canadian dollar on import volumes will not be felt until at least 1986. Several other explanations are possible. The figures above are for large institutional packs (3/4 gallon and 1 gallon sizes) and while B.C. prices for these are lower, home consumer packs may well be less competitively priced. Cahill found this to be the case in 1982; however, since then the exchange rate has become more of a critical factor and it is likely consumer packs, while being less competitively priced than institutional packs, are still cheaper than the imported product. A narrowed price difference would likely encourage the import of consumer packs, especially if the local product was in short supply.

One final explanation for a record level of imports may be the substantially increased demand for fresh oysters not only in B.C. but across Canada. This is certainly conceivable given a consumer trend toward greater consumption of fresh seafood and, if local producers were unable to meet this demand, buyers would likely be willing to pay the premium price for imports in order to secure fresh supplies. This is probably the case for the more lucrative eastern Canadian markets. In any event, a competitively priced, and readily available local product should be able to take advantage of excess demand in domestic markets by largely displacing fresh/frozen imports and to some degree winning back canned import sales as well.

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[5] Exchange rates act to equalize purchasing power and, in this case, production costs between the two countries. B.C. growers complaining of lower production costs in the U.S. are over-looking the equalizing effect of exchange rates and it is only when rates are prevented from seeking their true value that cost disadvantages (advantages) develop.

A final point favouring local producers is the fact that they have made little effort to expand B.C. or Canadian sales through advertising or consumer awareness programs. As Canadian per capita consumption has traditionally been half that of the U.S., considerable opportunities appear to exist for increasing fresh and frozen sales volumes.

For a number of reasons, then, it would seem B.C. producers are in a good position to displace fresh/frozen oyster imports. Access to markets, competitive pricing, and a partially untapped domestic market all point to greater sales opportunities in the future. But the above mentioned factors do not automatically guarantee sales success. Local producers will need to be aggressive in their approach, providing a product that is of equal or superior quality to imports, and at a price that meets or undercuts landed import prices. Furthermore, producers will have to ensure supplies are readily available and this entails dealing with various supply problems that have encumbered the industry for a number of years.

Finally, home consumer markets appear to be particularly underdeveloped, given the small portion of B.C. sales in the 8 oz. pack category. Efforts to create greater product acceptance and awareness with this buyer group will likely be of major benefit to the industry.

IV. CONCLUSION

The B.C. oyster industry remains viable and, in the future, will likely make an increasing contribution to the B.C. provincial economy. Significant recent developments include:

a) Stabilized and increasing production yields, especially for cultured oysters.

b) Dramatic increases in numbers of growers in the industry, resulting in a redistribution of primary production away from the larger integrated firms.

c) A strong price advantage for B.C. producers over imported products which has led to the emergence of export markets, especially for the half-shell oyster.

d) A continuing strong domestic demand for fresh/frozen oysters with good opportunities for increased sales.

e) A continuing central role for the Grower Association and Marketing Board, but possibly an evolving role for these organizations, given both the influx of new growers into the industry and changing industry markets.

f) The pricing structure in B.C. appears to be largely redundant, given the Board's lack of pricing authority over imports and the increasing share of industry production going to out-of-province markets.

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